Amendments to the Claims:

1. (Currently Amended) A non-naturally occurring, receptor competent low density lipoprotein particle comprising at least one peptide component wherein the peptide component is covalently bonded at the amino and/or carboxy terminus thereof to at least one lipophilic substituent, wherein the at least one peptide component comprises at least a binding site for an Apo B protein receptor, wherein the binding sequence of the peptide component has at least a 70% amino acid sequence identity to the amino acid sequence selected from the group consisting of (1) Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His (SEQ ID NO: 1); (2) Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 2); and (3) Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 8), and wherein the at least one peptide component is from 8 to 500 amino acid residues long.

2. (Currently Amended) The particle according to claim 1 wherein the at least one peptide component comprises at least a binding site for an Apo B protein receptor made up of amino acid residues selected from the group consisting of lysine, alanine, glutamine, tyrosine, asparagine, histidine, arginine, threonine, leucine and glycine ~~and analogues thereof~~.

3. (Cancelled)

4. (Previously Presented) The particle according to claim 1 wherein the peptide component is from 8 to 200 amino acid residues long.

5. (Previously Presented) The particle according to claim 1 wherein the peptide component is from 8 to 50 amino acid residues long.

6. (Previously Presented) The particle according to claim 1 wherein the peptide component is from 9 to 30 amino acid residues long.

7. (Previously Presented) The particle according to claim 1 wherein the lipophilic substituent of the peptide component is selected from the group consisting of cholesteryl esters, lipophilic drugs, lipid soluble cytotoxic drugs, pyrenes, retinyl derived compounds, polyunsaturated compounds, hormones, compounds having a steroid structure and C_{10}-C_{22} fatty acids.

8. (Previously Presented) The particle according to claim 1 wherein the lipophilic substituent of the peptide component is selected from the group consisting of cholesteryl oleate, triolein, etoposide, methotrexate diester, pyrene butyric acid, benzo(a)pyrene, 3-hydroxybenzo(a)pyrene, benzo(a)pyrene-7, 8-dihydrodiol, N-retinoyl-L-leucyl DOX-14-linoleate, β-carotene, estradiol, testosterone, aldosterone, diphenylhydantoin, bishydroxycoumarin, pentobarbital, perfluorinated cholesteryl oleate, anthracycline AD-32, and PCMA cholesteryl oleate.

9. (Previously Presented) The particle according to claim 1 wherein the lipophilic substituent of the peptide component is selected from the group consisting of cholesterol, retinoic acid and C_{10}-C_{22} fatty acids.

10. (Previously Presented) The particle according to claim 1 wherein the peptide component further comprises a hydrophilic substituent selected from the group consisting of hydroxyl, carboxyl and amino groups.

11. (Cancelled)

12. (Currently Amended) The particle according to claim 1 wherein the binding sequence of the peptide component has at least a 80% amino acid sequence identity to ~~an Apo B protein binding sequence~~ the amino acid sequence selected from the group consisting of (1) Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His (SEQ ID NO: 1); (2) Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 2); and (3) Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO:

8).

13. (Currently Amended) The particle according to claim 1 wherein the binding sequence of the peptide component has at least a 90% amino acid sequence identity to ~~an Apo B protein binding sequence~~ the amino acid sequence selected from the group consisting of (1) Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His (SEQ ID NO: 1); (2) Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 2); and (3) Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 8).

14. (Currently Amended) The particle according to claim 1 wherein the peptide component comprises at least one binding site selected from the group consisting of (1) Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His (SEQ ID NO: 1) ~~or a dimer thereof~~; (2) Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 2) ~~or a dimer thereof~~; [[or]] and (3) Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 8) ~~or a dimer thereof~~.

15. (Previously Presented) A particle according to claim 1 wherein the peptide component is selected from the group consisting of peptide A (SEQ ID NO:3), peptide B (SEQ ID NO:4), peptide C (SEQ ID NO:5), peptide D (SEQ ID NO:6), peptide E (SEQ ID NO:7) and peptide F (SEQ ID NO:9).

16. (Withdrawn) A peptide comprising an Apo B protein binding sequence having at least 70% amino acid identity with an Apo B protein binding site selected from sequence (1), (2) or (3) or dimers thereof.

17. (Withdrawn) A peptide according to claim 15 comprising an Apo B protein binding sequence having at least 80% amino acid identity with an Apo B protein binding site selected from sequence (1), (2) or (3) or dimers thereof.

18. (Withdrawn) A peptide according to claim 16 comprising an Apo B protein binding sequence having at least 90% amino acid identity with an Apo B protein binding site selected from sequence (1), (2) or (3) or dimers thereof.

19. (Withdrawn) A peptide comprising an Apo B protein binding site selected from

(1) Lys Ala Glu Tyr Lys Lys Asn Lys His Arg His (SEQ ID NO: 1) or a dimer thereof;

(2) Thr Thr Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 2) or a dimer thereof, or

(3) Arg Leu Thr Arg Lys Arg Gly Leu Lys (SEQ ID NO: 8) or a dimer thereof.

20. (Withdrawn) A peptide according to claim 16 from 8 to 500 amino acid residues long.

21. (Withdrawn) A peptide according to claim 16 from 8 to 200 amino acid residues long.

22. (Withdrawn) A peptide according to claim 16 from 8 to 50 amino acid residues long.

23. (Withdrawn) A peptide selected from the group peptide A, peptide B, peptide C, peptide D, peptide E and peptide F.

24. (Withdrawn) A method of cell culturing which comprises providing a cell culture medium comprising a non-naturally occurring receptor competent low density lipoprotein particle according to claim 1.

25. (Withdrawn) A method according to claim 24 wherein said particle is employed as a supplement for cell growth.